clarion ARX7170R

RDS-EON FM-MPX/MW/LW RADIO CASSETTE COMBINATION WITH CD CHANGER CONTROL

COMBINE RADIO-CASSETTE RDS - EON FM-MPX/PO/GO AVEC CONTROLEUR DE CHANGEUR DE CD

RDS-EON UKW-MPX/MW/LW-RADIO-KASSETTEN KOMBINATION MIT CD-WECHSLER-STEUERUNG

Owner's Guide
Manuel de l'utilisateur
Bedienungsanleitung

R·D·S [EON]

1. FEATURES

Tuner

EON-RDS Receiver with PI, PS, AF, TA, PTY, REG, CT, and M/S
Electronic Quartz-Locked PLL Tuning
Seek/Preset/Manual Tuning
24 Presets (18 FM, 6 MW/LW)
Preset Scan (PS)
Auto Store (AS)
Radio Monitor
DX/LO Switch

Cassette

Full Logic controls
Automatic Tape Head Cleaner
Auto Reverse With Dual Azimuth Adjustment
Automatic Metal Tape Selector
Power-off Pinch Roller Release
Automatic Programme Control (APC)
Blank Skip
Repeat
Intro Scan
Dolby B Noise Reduction
Double-Gutter Hard Permalloy Tape Head
Fail-Safe Tape Mechanism

CD Changer Control

Multi-Magazine control (6/12/18 discs)
Play/Pause
Random Play (Single Disc/Full Disc)
Intro Scan (Track/Disc)
Repeat (Track/Disc)
Track Search FF/FB
2-Speed Audible Search FF/FB

MD Changer Control

Disc Title Display
Play/Pause
Random Play (Single Disc/Full Disc)
Intro Scan (Track/Disc)
Repeat (Track/Disc)
Track Search FF/FB
2-Speed Audible Search FF/FB

Audio

High Power 4 x 30 W max.
Electronic Controls (Volume/Bass/Treble/Balance/Fader)
Audio Muting
Loudness
4-Channel Gold-Plated RCA Line Level Output
2-Channel Gold-Plated RCA Line Level Output (non-fading)
4-Channel Gold-Plated RCA Line Level Input (Switchable)

General

Primary Function Control
DSP/EQ control
Full Information Display
Night Illumination
Switchable Illumination Colour: Amber/Green
RDS Clock Time (CT)
Power Antenna Activator
Amp Turn-On Trigger
ISO Connector
Triggered Audio Mute For Cellular Telephone

Security

Detachable Control Panel (with protective case)
Blinking Theft-Preventing Indicator

1

CD/MD CHANGER
B.B.DSP/EQ

DOLBY B NR

RDS/EON

AR 7170R

TA/RTY

RPT
RDS
RDM
DOLBY NR
BX/LB

PROG
B.NND
P.OG

DISP
SHIFT

POWER
FUNC

A-M
LB

ADJ

DISP

EB

SCN
B/AS

clarion

| 1 | 2 | 3 |
| 4 | 5 | 6 |
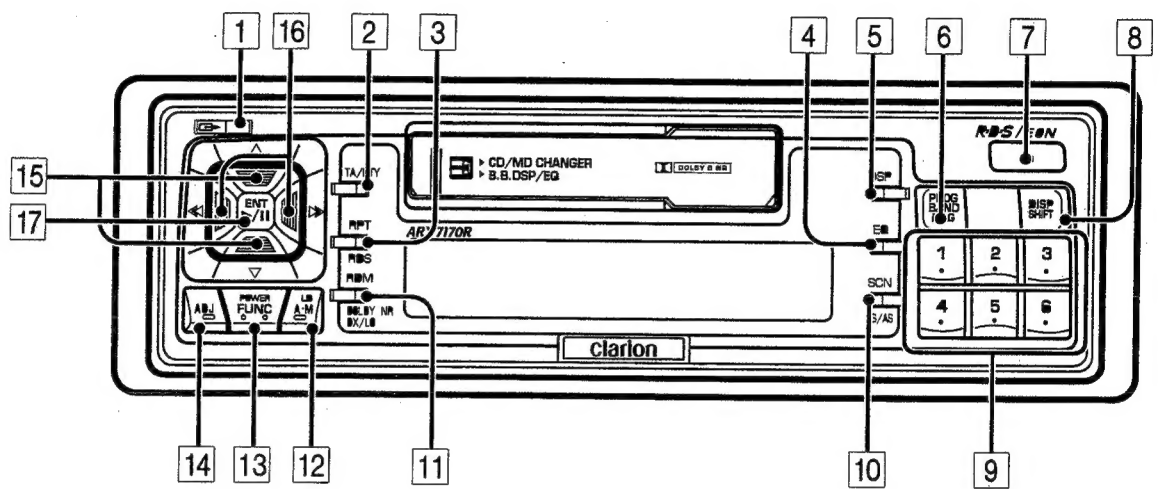
2. VOORZORGSMAATREGELEN BIJ HET BEHANDELEN VAN DE CASSETTE

1. Een losse band kan leiden tot moeilijkheden tijdens de bediening. Trek eventueel losse band strak vóór u een cassette insteekt, vooral wanneer u C-90 of vooropgenomen cassettes gebruikt.
2. Gebruik cassettes van het type C-30 tot C-90. Vermijd het gebruik van cassettes van het type C-120 of langer (De uiterst dunne band kan uitrekken of breken).
3. Maak de kop regelmatig schoon door een reinigingscassette van het natte type weer te geven in de speler. Raak de kop niet aan met magnetische of harde voorwerpen.
4. Wrijf het cassettemechanisme niet met olie in.
5. Neem de cassette altijd uit het mechanisme wanneer u het niet gebruikt. Blootstelling aan rechtstreeks zonlicht, extreme temperaturen of hoge vochtigheid kan de cassettes beschadigen.
6. De cassette wordt automatisch uitgeworpen als het toestel merkt dat de band loszit of dat er andere problemen met de band zijn. Controleer of de band in orde is vóór u hem gebruikt.

2. PRECAUCIONES Y CUIDADOS A TENER CON LOS CASSETTES

1. Las cintas flojas pueden causar dificultades de operación. Antes de insertar un cassette, elimine toda flojedad de la cinta, especialmente al usar cassettes C-90 o cintas pregrabadas.
2. Use cassettes C-30 a C-90. Evite usar cassettes C-120 o más largos. (Una cinta muy delgada puede estirarse o romperse con facilidad.)
3. Limpie periódicamente el cabezal reproduciendo un cassette de limpieza del tipo mojado. Evite tocar el cabezal con imanes u objetos duros.
4. No engrase el mecanismo del cassette.
5. Extraiga siempre los cassettes de la unidad cuando no estén en uso. La exposición a la luz directa del sol, temperaturas extremas o alta humedad, podrá dañar los cassettes.
6. El cassette será automáticamente expulsado si la unidad detecta flojedad u otros problemas en la cinta. Asegúrese de que el cassette esté en orden antes de usarlo.

2. RÄTT SKÖTSEL AV DINA KASSETTER

1. Slakt band kan ställa till problem när du spelar dina kassettband. Spola upp ev. bandslak innan du spelar en kassett, särskilt om det är en C-90 kassett.
2. Spela endast C-30 till C-90 kassetter. Spela inte C-120 kassetter eller de med längre band, eftersom bandet i dessa kassetter är så pass tunt att det lätt kan töja sig eller gå av.
3. Rengör tonhuvudet regelbundet genom att spela en våttyps rengöringskassett. Rör inte tonhuvudet med magnetiska eller hårda föremål.
4. Kassettmekanismen får inte smörjas.
5. Ta alltid ut kassetten ur spelaren när du inte tänker lyssna på band. Utsätt inte dina kassetter för direkt solljus, höga temperaturer eller hög fuktighet, eftersom de då kan skadas.
6. Kassetten stöts automatiskt ut om apparaten känner av att någonting är fel med bandet, t.ex. att det är löst. Kontrollera i så fall bandet innan du sätter i det igen.

2. PRECAUÇÕES E CUIDADOS COM AS CASSETES

1. Uma fita lassa pode dar origem a problemas de funcionamento. Retire a folga da fita antes de introduzir a cassete, principalmente quando usar cassetes C-90 ou cassetes pré-gravadas.
2. Use cassetes de C-30 a C-90. Evite usarcassetes C-120 ou mais longas (A fita muito delgada poderá ceder ou partir-se).
3. Limpe periodicamente a cabeça fazendo rodar no leitor uma cassete de limpeza do tipo molhado. Evite tocar a cabeça com objectos duros ou magnéticos.
4. Não lubrifique o mecanismo da cassete.
5. Retire sempre a cassete do aparelho quandonão estiver em uso. A exposição à luz solar directa, temperaturas extremas ou alta humidade poderá danificar as cassetes.
6. A cassete é ejectada automaticamente se o aparelho detectar folga ou outros problemasna cassete. Certifique-se que a cassete está em bom estado antes de a usar.
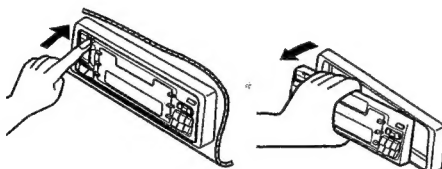
3. DCP (Detachable Control Panel)

The control panel can be detached to prevent theft. When detaching the control panel, store it in the included DCP case to prevent scratches. We recommend taking the control panel with you when leaving the car.
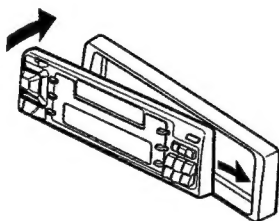
Removing the DCP

1 Turn the power off.
2 Press the release button 1.
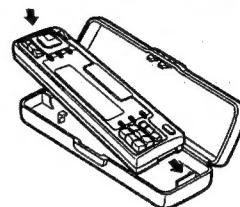   * The DCP is unlocked.
3 Remove the DCP.

Attaching the DCP

Insert the DCP into the right side of the main unit and press the left side to lock it. Do not insert the DCP from the left side. Doing so may damage it.


Storing the DCP in the DCP case

1 Insert the DCP into the right side of the case and press the left side to lock it.
2 To remove from the case, press the DCP to the right and draw it out upwards.

NOTE:
*The DCP can easily be damaged by shocks. After removing it, place it in its case and be careful not to drop it or subject it to strong shocks.
* When the release button is pressed and the DCP is unlocked, the car's vibrations may cause it to fall. To prevent damage to the DCP, always store it in its case after detaching it.
* The connector connecting the main unit and the DCP is an extremely important part. Be careful not to damage it by pressing on it with fingernails, pens, screwdrivers, etc.
* If the DCP is dirty, wipe off the dirt with a soft, dry cloth.

DCP connector

DCP rear panel   Main Unit connector
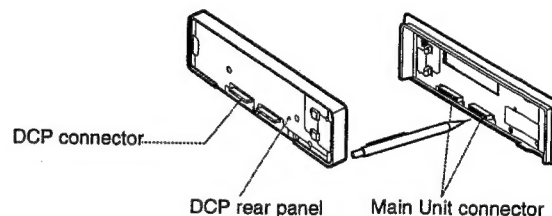
ANTI-THEFT INDICATOR

A red indicator can be set to flash as a means of preventing theft. This flashing red indicator warns thieves that the anti-theft device is activated.

1) Press the ADJ button 14.
2) Use the Up and Down buttons (▲ ▼) 15 to select "GENERAL".
3) Press the ENT button 17.
4) Use the Right and Left buttons (◄◄ ►►) 16 to select "BLINK LED".
5) Use the Up and Down buttons (▲ ▼) 15 to select "on".
   * If "off" is selected, the indicator is turned off.
6) Press the ADJ button 14 to return to the previous mode.
7) The red indicator flashes when the DCP is removed from the main unit.

4. OPERATION

Names of Buttons

1. DCP release button
2. TA/PTY button
3. RPT (repeat) button [🎵], [💿], [🅾]
   RDS button [📡]
4. EQ (equalizer) button
5. DSP (digital sound processor) button
6. PROGRAM button [🎵]
   BAND/T.MODE button [📡]
   MAG (magazine) button [💿]
7. Eject (▲) button [🎵]
8. DISP (display) button
   SHIFT button
9. Direct buttons (1 to 6)[📡], [💿], [🅾]
10. SCN (scan) button [🎵], [💿], [🅾]
    PS/AS (preset scan/auto store) button [📡]
11. DOLBY NR button [🎵]
    RDM (random) button [💿], [🅾]
    DX/LO (DX/local) button [📡]
12. A-M (audio mode) button
    LD (loudness) button
13. POWER button
    FUNC (function) button
14. ADJ (adjust) button

Primary Function Control

15. Up and down (▲ and ▼) buttons
16. Left and right (◄◄ and ►►) buttons
17. Mute button [📡]
    Play/pause (►/II) button [🎵], [💿], [🅾]
    ENT (enter) button

[📡] : In the radio mode
[🎵] : In the Tape mode
[💿] : In the CD changer mode
[🅾] : In the MD changer mode

Primary Function Control operation

The Primary Function Control is an important aspect of the ARX7170R.

To select ▲ , ▼ , ◄◄ or ►► : Press one of the four sides of the Primary Function Control.
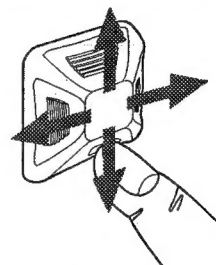
To use the [ENT/PLAY] button: Press on the centre of the button.
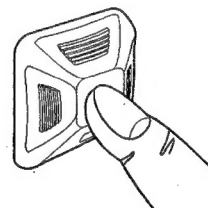
NOTE:
Do not turn the button while operating any primary function controls.

7

Adjustments made with the ADJ button

(not including DSP and equalizer adjustments)
The "*" mark indicates initial settings.

Adjustment	Settings	Mode in which adjustment is possible	Page
RDS setting	*on off	Any mode	12
Regional setting	*on off	Any mode as long as the RDS function is on	13
PTY code setting	*NEWS ~ OTHER M		13
Illumination	*COLOR-1 (G) COLOR-2 (A)	Any mode	17
BLINK LED setting	*off on		6
Seek tuning sensitivity	*DX LOCAL	Radio mode	11
Volume setting for traffic announce-ments, etc.	VOL 0 ~ VOL 33		15
AS band	*FM1/2/3 FM3		12
M/S setting	*off on	Radio mode with the RDS function on	13
Blank skip setting	*off on	Tape mode	11
MD display	*DISC TRACK	MD changer mode	17

8

Basic Operation

CAUTION

Turning the power on and off with the volume set at the maximum position has a negative effect on the unit and could harm your ears. Be careful to set the volume to an appropriate level.

1) Press the POWER button 🔟.
   * To turn the power off, press the POWER button for at least 1 second.
2) Press the FUNC button 🔟 to select the operation mode. The mode switches as follows each time the FUNC button is pressed:
   Radio → Tape → CD changer → MD changer
   → Radio
   * If a component is not connected, that operation mode cannot be selected.
   * "NO CASS" appears when no tape is loaded in the ARX7170R, and "NO DISC" or "NO MAGA" appears when no disc is loaded in the CD changer or MD changer.
3) Use the up and down buttons 🔟 to adjust the volume.
   ▲ : Increases the volume.
   ▼ : Decreases the volume.

Audio mode adjustments

1) Press the A-M button 🔟 to select the audio mode. The mode switches as follows each time the A-M button is pressed:
   BASS/TREB → BAL/FAD → Previous mode
2) Use the left and right and the up and down buttons 🔟 🔟 to adjust the bass and treble.
   <Adjusting the bass>
   ▶▶ : Bass gets stronger.
   ◀◀ : Bass gets weaker.
   <Adjusting the treble>
   ▲ : Treble gets stronger.
   ▼ : Treble gets weaker.
3) Use the left and right and the up and down buttons 🔟 🔟 to adjust the balance and fader.
   <Adjusting the balance>
   ▶▶ : Sound from right speakers gets stronger.
   ◀◀ : Sound from left speakers gets stronger.
   <Adjusting the fader>
   ▲ : Sound from front speakers gets stronger.
   ▼ : Sound from rear speakers gets stronger.

Loudness function

Press the LD button 🔟 for at least 2 seconds to turn the loudness function on and off.
* When a DSP unit (DPH9100) is connected, the loudness effect is automatically controlled.

Switching the display

The display changes as follows each time the DISP button 🔟 is pressed:
   Operation mode display → Time display → Operation mode display
* The sub display is displayed during playback on the tape deck, CD changer or MD changer and in the radio mode.

Mode display
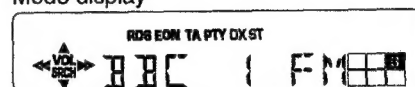
Time display

* These examples are for the radio mode.

9

Tape Operation

Loading tapes

Insert the cassette tape into the slot with the exposed tape side to the right.
Playback starts automatically.
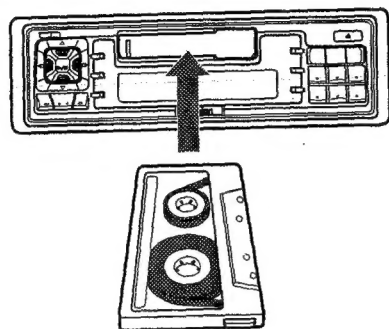
* The metal tape setting is set automatically when a metal or chrome tape is loaded.
* When the end of the cassette tape is reached, the auto reverse mechanism is activated and the other side of the tape begins playing automatically.
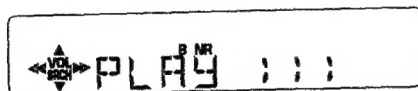
Listening to a tape which is already loaded
Press the FUNC button 13 to select the tape mode. Playback begins automatically.

* When the ARX7170R is switched to another mode during the tape fast-forward, rewind or search operation, the tape mechanism automatically stops once the operation is completed. (Monitor function)

Stopping playback temporarily

Press the play/pause button ▶/‖ 17. Press the button again to resume playback.

Ejecting cassette tapes

Press the eject button 7. The cassette tape is ejected.

* The unit switches to the radio mode automatically 4 seconds after the eject button is pressed.

Fast-forwarding and rewinding

Use the left and right buttons 16.

▶▶ : Press this to fast-forward the tape.
◀◀ : Press this to rewind the tape.

APC (Auto Programme Control)

Press the left or right button 16 twice.

▶▶ : Press this to move ahead to the beginning of the next track.
◀◀ : Press this to move back to the beginning of the current track.

Switching to the other side of the tape

Press the PROG button 6. Playback is automatically switched to the other side of the cassette tape.

FF scan function

When the SCN button 10 is pressed, "SCN" appears on the display, and the first 10 seconds of all the tracks on the cassette tape are played. Press the SCN button again to stop scanning.

Repeat function

When the RPT button 3 is pressed, "RPT" appears on the display and the current track is played repeatedly. Press the RPT button again to cancel the repeat mode.

Dolby Noise Reduction System

Press the DOLBY NR button 11. "B NR" appears on the display, and the Dolby NR function is turned on.
Press the button again to turn the Dolby NR function off.

* Dolby Noise Reduction is manufactured under license of the Dolby Laboratories Licensing Corporation. "DOLBY" and the double D mark ▯▯ are registered trademarks of the Dolby Laboratories Licensing Corporation.

10

Blank skip function

Use this function to automatically skip to the beginning of the next recorded section when there is a blank section of 12 seconds or more on the tape.
1) In the tape mode, press the ADJ button ⑭.
2) Use the up and down buttons ⑮ to select "UTILITY".
3) Press the ENT button ⑰. "BLS" appears on the display.
4) Use the up and down buttons to select "on". The blank skip function is now set.
   * "BLS" is lit on the display when the blank skip function is on.
   * Select "off" to turn the blank skip function off.
5) Press the ADJ button.

NOTE:
The APC, scan, repeat and blank skip functions will not work with the following types of tapes:
* Tapes on which the recording level is low
* Tapes on which there is less than 4 seconds of blank space between tracks
* Tapes on which there are long pauses in the middle of tracks
* Tapes on which there is much noise between selections

Radio Operations

Listening to the radio

1) Press the FUNC button ⑬ and select the radio mode. The radio turns on.
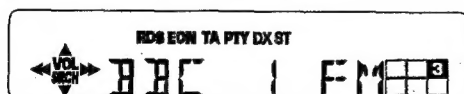
2) To tune in a preset station, first press the BAND button ⑥ and select FM1, FM2, FM3 or AM(LW/MW).
   The band changes as follows each time the BAND button is pressed:
   FM1 → FM2 → FM3 → AM → FM1
3) Use the direct buttons ⑨ to select the desired station.

Seek tuning

1) Press the BAND button ⑥ and select the desired band.
2) The seek tuning mode is set when "SRCH" is lit on the display.
3) Press the left or right button ⑯. Seek tuning automatically stops when a station is found.
   * There are two seek tuning modes: DX seek, in which all receivable stations are tuned in in order, and local seek, in which only stations with good reception are tuned in.

Switching between DX and local

The DX mode is set when "DX" is lit on the display.

Switching (1)
In the radio mode, press the DX/LO button ⑪ to switch between "DX" and "LOCAL".

Switching (2)
1) Press the ADJ button ⑭.
2) Use the up and down buttons ⑮ to select "UTILITY", then press the ENT button ⑰.
3) Use the left and right buttons ⑯ to select "DX/LOCAL".
4) Use the up and down buttons to select "DX" or "LOCAL".
5) Press the ADJ button.

Manual tuning

1) Press the BAND button ⑥ and select the desired band.
2) Press the BAND button again for more than 2 seconds. "SRCH" turns off and the manual tuning mode is set.
3) Use the left and right buttons ⑯ to tune in the desired frequency.
   * The mode automatically returns to the seek mode after 7 seconds.

Presetting stations

A total of 24 stations can be preset, 6 each for the FM1, FM2, FM3 and AM bands.

NOTE:
When a station is preset, the station previously stored in the memory at that position is cleared.

Presetting stations manually

1) Press the BAND button ⑤ to select the band at which to store the station.
2) Use the left and right buttons ⑯ to tune in the station to be preset.
3) Press the direct button ⑨ at which you want to store that station for at least 2 seconds.

Auto store function

1) Press the BAND button ⑤ to select the band at which to store the stations.
2) Press the AS button ⑩ for at least 2 seconds. Stations with good reception are automatically stored at direct buttons ⑨ 1 to 6.

   * If there are fewer than 6 stations with good reception, the stations previously stored at the remaining buttons are not cleared.

Setting the band(s) for the auto store function

If there are preset frequencies you do not want to clear, change the band(s) for which the auto store function can be used.

1) Press the ADJ button ⑭.
2) Use the up and down buttons ⑮ to select "UTILITY", then press the ENT button ⑰.
3) Use the right and left buttons ⑯ to select "AS BAND".
4) Use the up and down buttons ⑮ to select "FM1/2/3" or "FM3".

   * When "FM3" is selected, the auto store function can only be used for the FM3 band.

5) Press the ADJ button.

Preset scanning

When the PS button ⑩ is pressed, the preset memory numbers flash and the stations are tuned in for 7 seconds each in the order in which they were stored. Press the PS button again to cancel the preset scanning mode.

NOTE:
The auto store mode is set if the PS button is pressed for more than 2 seconds.

Mute

Use this function to turn off the sound immediately.

Press the MUTE button ⑰. The sound turns o and "MUTE" appears on the display. Press th MUTE button again to cancel the mute mode.

RDS (Radio Data System) Operations

About the RDS functions

* When an RDS station is tuned in, the programme name is displayed. (PS: Programme Service name
* When an emergency broadcast is received while a RDS station is tuned in, "ALARM" is displayed. The volume is automatically set to the preset volume level.
* If the RDS station can no longer be received in goc conditions in the current location, "RDS" flashes on the display. "RDS" stops flashing when good reception is again possible.
* When seek tuning is used while in the RDS mode, only stations broadcasting RDS signals are tuned ir

Preset scanning in the RDS mode

When the PS button ⑩ is pressed while in the RDS mode, only preset RDS stations are scar ned.

Auto store function in the RDS mode

When the AS button ⑩ is pressed for at least 2 seconds while in the RDS mode, only RDS sta tions are stored at the preset buttons.

Selecting the RDS mode (1)

Press the RDS button ③. This turns the RDS mode on and off.
* This is only possible when in the radio mode.
* "RDS" is lit when the RDS mode is on.

Selecting the RDS mode (2)

1) Press the ADJ button ⑭.
2) Use the up and down buttons ⑮ to select "GENERAL", then press the ENT button ⑰.

12

3) Use the left and right buttons 16 to select "RDS".
4) Use the up and down buttons 15 to select "on".
5) Press the ADJ button.
   * "RDS" is lit when the RDS mode is on.

Switching (over) to the best alternative frequency broadcasting the same programme (AF: Alternative Frequencies)

Whenever a preset button is pressed, the best conditioned RDS station broadcasting the same programme can be tuned in automatically.

Regional programme function (REG)

When this function is on: Only local (regional) stations in the local area are received.
When this function is off: When you enter another area while receiving a regional station in the first area, a regional station in the new area is tuned in.
1) Press the ADJ button 14.
2) Use the up and down buttons 15 to select "GENERAL", then press the ENT button 17.
3) Use the left and right buttons 16 to select "REG".
4) Use the up and down buttons 15 to select "on".
5) Press the ADJ button.
   * This operation is only possible when the RDS mode is on.

Searching for other programmes in the regional mode

When the regional programme mode is off and a preset RDS station is tuned in, another regional station is tuned in when the same preset button is pressed again.
* This function may not work in some regions.

RDS EON (Enhanced Other Networks information)

"EON" lights when an RDS station's EON data

is received.
1) When a traffic announcement starts while in the traffic announcement standby mode, "EON" lights and the traffic announcement is automatically tuned in, even when it is on a station other than the one which is currently tuned in.
2) When a programme of the selected programme type starts while in the PTY standby mode, "EON" lights and that programme is automatically tuned in, even when it is on a station other than the one which is currently tuned in.
   * Some countries and stations do not transmit EON data.

Music/Speech function (M/S)

This function automatically turns the loudness function off so that dialogues are easier to hear.
1) Press the ADJ button 14.
2) Use the up and down buttons 15 to select "UTILITY", then press the ENT button 17.
3) Use the left and right buttons 16 to select "M/S ACT".
4) Use the up and down buttons to select "ON".
5) Press the ADJ button.
   * The music/speech function will not work when the DPH9100 or DPH7100 is connected.
   * The music/speech function can only be turned on and off when in the radio mode with the RDS mode on.
   * Some stations do not broadcast the data for turning the loudness function off.

PTY (Programme Type) function

This function uses RDS PTY data so that stations broadcasting programmes of the desired programme type (PTY) can be tuned in using one of the following two methods:
(1) PTY SEEK: Use this to turn on immediately PTY SEEK for stations broadcasting programmes of the selected programme type.
(2) PTY standby: Use this to automatically interrupt the current operation and tune in stations broadcasting programmes of the selected programme type, using the EON data.

13

* The PTY function does not work unless the RDS mode is turned on. "RDS" is lit on the display when the RDS mode is on.
* When in the traffic announcement standby mode, traffic announcements have priority over PTY broadcasts.
* Some countries and stations do not transmit PTY and EON data.

Selecting the PTY SEEK mode

1) Press the ADJ button ⑭.

2) Use the up and down buttons ⑮ to select

"GENERAL", then press the ENT button ⑰.
3) Use the left and right buttons ⑯ to select "PTY SEL".
4) Use the up and down buttons to select one of the PTY codes, from "NEWS" to "OTHER M".
5) Press the ENT button ⑰. "PTY" appears on the display, the PTY SEEK operation begins, and when a station is found, the selected PTY is displayed.

* If there are no stations broadcasting programmes of the selected programme type, the previous station is tuned in and the PTY standby mode is set automatically.

Selecting the PTY standby mode (1)

1) Press the ADJ button ⑭.
2) Use the up and down buttons ⑮ to select "GENERAL", then press the ENT button ⑰.
3) Use the left and right buttons ⑯ to select "PTY SEL".
4) Use the up and down buttons to select one of the PTY codes, from "NEWS" to "OTHER M".
5) Press the ADJ button to return to the previous mode. "PTY" lights and the PTY standby mode is set.

Selecting the PTY standby mode (2)

Follow steps 1) to 3) in "Selecting the PTY standby mode (1)" to select "PTY SEL", then press one of the direct buttons ⑨. The PTY standby mode for the programme type stored at that button is set.

Presetting programme types

Follow steps 1) to 4) in "Selecting the PTY standby mode (1)" to select the programme type, then press one of the direct buttons ⑨ for more than 2 seconds. That programme type is stored in the memory, and "P1 MEMO" appears on the display

(when direct button "1" is pressed).
* Six programme types can be stored, one each at buttons 1 to 6.

Canceling the PTY standby mode

To cancel the PTY standby mode, press the PTY button ② for more than 2 seconds. "PTY" turns off. To set the PTY standby mode again, press the PTY button again for more than 2 seconds.

* When the PTY button is pressed while receiving a programme of the selected programme type, PTY reception is canceled and the PTY standby mode is set.

PTY display function

Use this function to display the programme type of the station currently tuned. Press the DISP button ⑧ to switch the display.

* "– – – – –" is displayed if the PTY data cannot be received.

TA (Traffic Announcement) function

This function automatically tunes in traffic announcements when they start.
Press the TA button ②. "TA" lights and the radio starts searching for stations broadcasting traffic announcements.
To turn the TA function off, press the TA button again. However, when the TA button is pressed while a traffic announcement is tuned in, the traffic announcement mode is cancelled and the TA stand by mode is set.

* The traffic announcement standby mode is set when there is (are) a station(s) broadcasting traffic announcements.
* When a traffic announcement has started, "TRA INFO" is displayed, after which the PS (Programme Service name) or the frequency appears.
* When a traffic announcement starts, the loudness function is turned off and the volume is automatically set to the preset level.
* When the TA button is pressed while tuned in to a station which is not broadcasting traffic announcements, the radio searches for a station which is broadcasting traffic announcements.
* If no traffic announcement is found, "NO TRA" is displayed. Press the TA button to cancel the TA mode.

Preset scanning when "TA" is lit or flashing
When the PS button ⑩ is pressed while "TA" is lit or flashing, only preset traffic announcement stations are scanned.

Auto store when "TA" is lit or flashing
When the AS button ⑩ is pressed for more than 2 seconds while "TA" is lit or flashing, only preset traffic announcement stations are stored.

Setting the volume for traffic announcements and emergency broadcasts

1) Press the ADJ button ⑭.
2) Use the up and down buttons ⑮ to select "UTILITY", then press the ENT button ⑰.
3) Use the left and right buttons ⑯ to select "TA VOL".
4) Use the up and down buttons to adjust the volume.
5) Press the ADJ button.

* This operation is only possible in the radio mode.

Time display function (CT: Clock Time)

The time can be displayed in areas broadcasting CT data.
Press the DISP button ⑧ to switch the display.

* Some countries and stations do not broadcast CT data. Also note that in some areas the displayed time may be wrong.
* "CT--:--" is displayed when no CT data is being received.

CD Changer Operations

When a separately sold CD changer (CDC605/CDC1205/CDC1805) is connected, it can be controlled from the ARX7170R.

CD-ROMs
* CD-ROMs cannot be played.

Listening to CDs

1) Press the FUNC button ⑬ to select the CD changer mode. Playback starts automatically.
   * The pause mode is set when the CD changer mode is set after the power is turned on or while the magazine is being loaded in the CD changer. In these cases, press the play/pause button ⑰ to start playback.

2) Press the play/pause button ⑰ to stop playback temporarily.
3) Use the direct buttons ⑨ to select the desired disc.
   * Nothing happens if a direct button corresponding to the number of a magazine in which no disc is loaded is pressed.
   * When a disc which is currently playing is selected, playback resumes from the first track on that disc.
4) Use the left and right buttons ⑯ to select tracks.
   ▶▶ : Press this to start playback from the beginning of the next track.
   ◀◀ : Press this to move back to the beginning of the current track. Press it again to move back to the beginning of the previous track.

Fast forward and fast backward

Press and hold in the left and right buttons ⑯.
   ▶▶ : Press and hold this to move rapidly forward.
   ◀◀ : Press and hold this to move rapidly backward.
   * The disc moves at 3 times the normal speed after the button is held in 1 second, at 30 times the normal speed after it is held in 3 seconds.

Scan function

When the SCN button ⑩ is pressed, "SCN" appears on the display, and the first 10 seconds of all the tracks on the disc are played. Press the SCN button again to stop scanning.

Disc scan function
When the SCN button ⑩ is pressed for more than 2 seconds, "DISC" and "SCN" appear and the first 10 seconds of the first track on all the discs are played. Press the SCN button again to stop scanning.

Repeat function
When the RPT button ③ is pressed, "RPT" appears on the display and the current track is played repeatedly. Press the RPT button again to cancel the repeat mode.

Disc repeat function
When the RPT button ③ is pressed for more than 2 seconds, "DISC" and "RPT" appear on the display and the current disc is played repeatedly. Press the RPT button again to cancel the disc repeat mode.

Random playback
When the RDM button ⑪ is pressed, "RDM" appears on the display, and all the tracks on the disc are played in random order. Press the RDM button again to cancel the random play mode.

Disc random playback
When the RDM button ⑪ is pressed for more than 2 seconds, "DISC" and "RDM" appear on the display, and all the tracks on all the discs in the CD changer are played in random order. Press the RDM button again to cancel the disc random play mode.

Switching the magazine (When the CDC1205 or CDC1805 is connected)
This function can be used when a CD changer with multiple magazines is connected.
The next magazine is selected each time the MAG button ⑤ is pressed.

Locking the magazine
Press the MAG button ⑤ for more than 2 seconds. "[◎]" appears on the display, and only the currently displayed magazine is played.
To cancel this, press the MAG button again for more than 2 seconds.

* Magazines can be selected even when a magazine is locked. When this is done, the selected magazine is locked.
* When a magazine is locked, scanning and random playback are only performed for the locked magazine.

MD Changer Operations

When a separately sold Mini Disc changer (MDJ474) is connected, it can be controlled from the ARX7170R.

Listening to MDs
1) Press the FUNC button ⑬ to select the MD changer mode. Playback starts automatically.

* When the MD changer mode is set, the disc title is displayed. "– – – – –" is displayed if no title has been input. Also, when the SHIFT button ⑧ is pressed, the display switches between the track number play time, title and clock.

2) Press the play/pause button ⑰ to stop playback temporarily.

3) Use the direct buttons ⑨ to select the desired MD.
   * Nothing happens if a direct button at which no MD is loaded is pressed.
   * When the MD which is currently playing is selected, playback resumes from the first track on that MD.

4) Use the left and right buttons ⑯ to select tracks.
   ▶▶ : Press this to start playback from the beginning of the next track.
   ◀◀ : Press this to move back to the beginning of the current track. Press it again to move back to the beginning of the previous track.

16

Fast forward and fast backward

Press and hold in the left and right buttons ⑯.

▶▶ : Press and hold this to move rapidly forward.

◀◀ : Press and hold this to move rapidly backward.

* The disc moves at 3 times the normal speed after the button is held in 1 second, at 15 times the normal speed after it is held in 3 seconds.

Scan function

When the SCN button ⑩ is pressed, "SCN" appears on the display, and the first 10 seconds of all the tracks on the MD are played. Press the SCN button again to stop scanning.

* Scanning starts from the track following the one that is currently playing.

Disc scan function

When the SCN button ⑩ is pressed for more than 2 seconds, "DISC" and "SCN" appear and the first 10 seconds of the first track of all the MDs are played.Press the SCN button again to stop scanning.

*Scanning starts from the MD following the one that is currently playing.

Repeat function

When the RPT button ③ is pressed, "RPT" appears on the display and the current track is played repeatedly. Press the RPT button again to cancel the repeat mode.

Disc repeat function

When the RPT button ③ is pressed for more than 2 seconds, "DISC" and "RPT" appear on the display and the current MD is played repeatedly. Press the RPT button again to cancel the disc repeat mode.

Random playback

When the RDM button ⑪ is pressed, "RDM" appears on the display, and all the tracks on the current MD are played in random order. Press the RDM button again to cancel the random play mode.

Disc random playback

When the RDM button ⑪ is pressed for more than 2 seconds, "DISC" and "RDM" appear on the display, and all the tracks on all the MDs in the MD changer are played in random order. Press the RDM button again to cancel the disc random play mode.

Scrolling titles

Press the SHIFT button ⑧ for more than 1 second while in the title display mode to scroll the titles.

Selecting titles

1) Press the ADJ button ⑭.
2) Use the up and down buttons ⑮ to select "UTILITY".
3) Press the ENT button ⑰. "D/T TITLE" is displayed.
4) Use the up and down buttons ⑮ to select "DISC" or "TRACK".
5) Press the ADJ button.

Other Handy Functions

Switching the colour of the illumination

The illumination colour can be switched between green and amber.
1) Press the ADJ button ⑭.
2) Use the up and down buttons ⑮ to select "GENERAL", then press the ENT button ⑰.
3) Use the left and right buttons ⑯ to select "ILLUM".
4) Use the up and down buttons ⑮ to select "COLOR-1" or "COLOR-2".
   * The illumination turns green when "COLOR-1" is selected, amber when "COLOR-2" is selected.
5) Press the ADJ button.

Triggered audio mute for cellular telephones

With this function, "TEL" appears on the display and the sound is muted when a call is received. The previous operation resumes when the line is disconnected.

DSP and Equalizer Operations

When a separately sold expanded graphic digital sound processor or expanded graphic equalizer is connected, the functions described below can be controlled from the ARX7170R.

Fine-adjustment of the listening position (when the DPH9100 or DPH7100 is connected)

The time required from when the sound leaves the speaker until it reaches you can be fine-adjusted to create a natural sound field, no matter what seat you are sitting in.

Numerous preset sound fields (when the DPH9100 or DPH7100 is connected)

The most common sound fields are already stored in the memory.
In addition, six other sound field settings adjusted by the user can also be stored in the memory (when the DPH9100 is connected).

Six preset equalizer settings (when the DPH9100, DPH7100, or EQH5100 is connected)

Six equalizer settings are preset, offering a choice of the settings for various types of music. In addition, six other settings adjusted by the user can also be stored in the memory.

Giving titles (only when the DPH9100 is connected)

Titles can be given to the user-adjusted sound fields and equalizer settings and displayed when they are selected.

DSP Functions

Turning the DSP effect on and off

Press the DSP button ⑤ for more than 2 seconds to turn the DSP effect on and off. When the DSP effect is on, "DSP B1", "DSP B2" or "DSP U" appears on the display.

Fine-adjusting the listening position

1) Press the A-M button ⑫ to set the listening position adjustment display.
2) Press the ENT button ⑰ to select the position to be adjusted. The position switches as follows each time the ENT button is pressed:
   FULL SEAT → FRONT-R → FRONT-L → FRONT → REAR → PASS → FULL SEAT
3) Use the up and down buttons ⑮ to adjust the fader.
4) Use the right and left buttons ⑯ to adjust the balance.

Selecting the DSP sound field

1) Press the FUNC button ⑬ to select the desired mode.
2) Press the DSP button ⑤ so that "DSP" flashes on the display.
3) Press the BAND button ⑥ and select the group including the desired sound field.
   The group changes as follows each time the BAND button is pressed:
   DSP B-1 → DSP B-2 → DSP-U → DSP B-1
   (When the DPH7100 is connected, only "DSP BASIC" can be selected.)
4) Use the direct buttons ⑨ to select the desired sound field.

Sound fields
<DSP BASIC 1>
1. **HALL:** Sound of a large concert hall. (♪)
2. **CHURCH:** Sound of a church with a very high ceiling. (♪)
3. **STADIUM:** Sound of a large stadium with no ceiling or walls. (♪)
4. **LIVE:** Sound of a live performance hall, somewhat larger than a jazz club. (♪)
5. **DISCO:** Sound of a disco with strong bass. (♪)

6. **JAZZCLUB**: Sound of a jazz club with a low ceiling. (♪)

\<DSP B - 2\>

1. **DOME**: Sound of an indoor sports arena. (♭)
2. **CHAMBER**: Sound of a large hall in a palace. (♭)
3. **PARK**: Sound of a spacious outdoor area. (♪)
4. **THEATER**: Sound of a movie or drama theatre. (♪)
5. **STUDIO**: Sound of a listening room in a home. (♪)
6. **BGM**: Sound with the vocals cut. (★)

   * (♭) - Reverberation type sound fields

   (♪) - Early reflection type sound fields

   (★) - "BGM" (background music) type sound field

Editing DSP sound field settings

1) Select the preset sound field to serve as a base.
2) Press the DSP button ⑤ so that "DSP" flashes on the display.
3) Press the ADJ button ⑭.
4) Use the up and down buttons ⑮ to select "DSP EDIT", then press the ENT button ⑰.
5) Use the left and right buttons ⑯ to select the parameter to be adjusted.
6) Use the up and down buttons to adjust the setting.
7) To store a setting in the memory, press one of the direct buttons ⑨ for more than 2 seconds. (Only when the DPH9100 is connected)
8) Press the ADJ button.

Parameters which can be adjusted in the "DSP EDIT" mode

1. **EFFECT**: Percentage of reflected sound (0% ~ 100%)
2. **INIT-DLY**: Sense of distance between sound source and walls (1ms ~ 100ms)
3. **REV-TIME**: Length of reverberations (0.3s ~ 10.0s)
4. **R-SIZE**: Sense of expansion (0.1 ~ 4.0)
5. **HIGH**: Percentage of high frequencies in reverberations (0.1 ~ 4.0)
6. **LIVENESS**: Sense of dynamism (0 ~ 10)

   * For details on the parameters, refer to the DSP unit's operating instructions.

   * When the DPH7100 is connected, only the "EFFECT" parameter can be edited.

   * For some sound fields, not all the parameters can be adjusted.

   For reverberation type sound fields (♭): The "R-SIZE" and "LIVENESS" parameters cannot be adjusted.

For early reflection type sound fields (♪): The "REV-TIME" and "HIGH" parameters cannot be adjusted.

For the BGM type sound field (★): Only the "EFFECT" parameter can be adjusted.

Giving titles to DSP and equalizer settings (only when the DPH9100 is connected)

1) Press the DSP ⑤ or EQ ④ button so that "DSP" or "EQ" flashes on the display.
2) Press the BAND button ⑥ to select "DSP USER" or "EQ USER".
3) Use the direct buttons ⑨ to select the number of the user setting (U-1 to U-6) to which you want to give a title.
4) Press the ADJ button ⑭.
5) Use the up and down buttons to select "DSP TITLE" or "EQ TITLE", then press the ENT button ⑰.
6) Use the left and right buttons ⑯ to select the cursor position, then use the up and down buttons to select and input the characters.

   The characters change as follows each time the SHIFT button ⑧ is pressed:

   Capital letters ➡ Numbers ➡ Umlaut and accented letters ➡ Small letters Symbols ➡ Capital letters
   * Up to 8 characters can be set.

7) Press the ENT button for more than 2 seconds to store the title in the memory.
8) Press the ADJ button.

Turning the auto loudness function on and off (only when the DPH9100 is connected)

Press the LD button ⑫ for more than 2 seconds. "ALD" appears on the display, and the auto loudness function is turned on.
Press the LD button again for more than 2 seconds to turn the auto loudness function off.

Adjusting the auto loudness function
The amount of compression can be adjusted (between 0 ~ 10) without changing the loudness.

1) Press the DSP button ⑤ so that "DSP" flashes on the display.
2) Press the ADJ button ⑭.

3) Use the up and down buttons ⑮ to select "ALD ADJ", then press the ENT button ⑰.

4) Use the up and down buttons to adjust the setting.

5) Press the ADJ button.

Equalizer Functions

Turning the equalizer effect on and off

Press the EQ button ④ for more than 2 seconds to turn the equalizer effect on and off.
When the equalizer effect is on, "EQ B" or "EQ U" appears on the display.

Selecting the equalizer setting

1) Press the FUNC button ⑬ to select the desired mode.

2) Press the EQ button ④ so that "EQ" flashes on the display.

3) Press the BAND button ⑥ and select the group including the desired sound field.
   The group changes as follows each time the BAND button is pressed:
   EQ BASIC → EQ USER → EQ BASIC

4) Use the direct buttons ⑨ to select the desired equalizer setting.
   <Equalizer settings>

   1. B-BOOST: Low frequencies emphasized.
   2. H-BOOST: Medium and high frequencies emphasized.
   3. ACOUSTIC: Medium frequencies (vocals) emphasized.
   4. IMPACT: Low and high frequencies emphasized.
   5. SMOOTH: Soft, relaxed sound.
   6. FLAT: The original sound.

Editing the equalizer settings

1) Select the preset equalizer setting to serve as a base.

2) Press the ADJ button ④.

3) Use the up and down buttons ⑮ to select the desired adjustment, then press the ENT button ⑭.

4) When "EQ EDIT", "EQ MIN F", "WOOFER" or "P-EQ" has been selected, use the left and right buttons

⑯ to select the parameter to be adjusted.

5) Use the up and down buttons to adjust the setting.

6) To store a setting in the memory, press one of the direct buttons ⑨ for more than 2 seconds.

7) Press the ADJ button.
   * For details on the parameters, refer to the equalizer's operating instructions.

Equalizer adjustments

<EQ EDIT>
Use this to adjust the levels of the various frequencies

<EQ MIN F (when the DPH9100 or DPH7100 is connected)>
This function allows you to switch the minimum adjustment frequency between 30Hz and 50Hz.

<Parameters which can be adjusted in the " WOOFER mode>

1. ST/MONO: Switch this according to the number of speakers being used. (OFF ~ MONO ~ STEREO)
2. WOF-VOL: Sets the woofer's volume. (0 ~ 14)
3. LPF: Sets the low-pass filter's frequency. (50Hz ~ 80Hz ~ 120Hz)
4. LPF SLOP: Sets the low-pass filter's slope. (12dB/oct ~ 18dB/oct ~ 24dB/oct)
5. HPF: Sets the high-pass filter's frequency. (Through - 50Hz ~ 80Hz ~ 120Hz)
6. HPF SLOP: Sets the high-pass filter's slope. (12dB/oct ~ 18dB/oct ~ 24dB/oct)
7. TEST TONE: Used for testing the speaker wiring.
   * When the "ST/MONO" setting is turned OFF, parameters 2, 3 and 4, and parameter 7 "WOOFER-L" and "WOOFER-R" cannot be adjusted.
   * Parameters 4 and 6 can only be adjusted when the DPH9100 is connected.
   * Parameter 7 cannot be adjusted when the EQH5100 is connected.

<Parameters which can be adjusted in the "P-EQ" mode (only when the DPH9100 is connected)>

1. P-EQ F/R: Switches between the front and rear. (OFF ~ REAR ~ FRONT)
2. F-PRESET: Selects one of 6 types of parameters according to car type. (TYPE 1 ~ TYPE 6)

3. **R-PRESET**: Selects one of 7 types of parameters according to car type. (TYPE 1 ~ TYPE 7)

4. **BAND**: Selects the band to be adjusted. (1 ~ 4: 1 and 2 are for low frequencies, 3 and 4 for medium and high frequencies)

5. **FREQ**: Selects the centre frequency for the adjustment. (1 and 2: 20Hz to 500Hz, 3 and 4: 630Hz to 20kHz)

6. **GAIN**: Adjusts the level. (-12dB ~ +12dB)

7. **Q**: Adjusts the sharpness of the frequency curve. (1, 3, 5, 7 and 20)

   * Parameters 2 to 7 cannot be adjusted when the "P-EQ F/R" parameter is turned off.

<PINK NOISE>

Pink noise (adjustment sounds) can be emitted in the order shown below by pressing the SHIFT button ⑧ for more than two seconds while in the parametric equalizer adjustment mode.

Front → Rear → All → Off → Front

<SURROUND (only when the EQH5100 is connected)>

The surround effect can be turned on and off.

* For details on the adjustment items, see the DSP or equalizer manual.

NOTES:

When the DSP979E or 900SEQ is connected, the corresponding mode must be set.

<Setting the DSP mode>
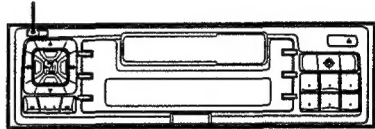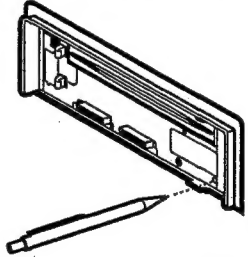
1. Set the DSP unit's volume to the minimum and the ARX7170R's volume to the maximum.

2. Press direct button ⑨ number "2" while holding in the SHIFT button ⑧. "DSP conn" appears on the display, and the DSP mode is set.

3. To cancel the DSP mode, once again press direct button ⑨ number "2" while holding in the SHIFT button ⑧. "DSP no conn" appears on the display, and the DSP mode is canceled.

<Setting the equalizer mode>

1. Press direct button ⑨ number "3" while holding in the SHIFT button ⑧. "EQ conn" appears on the display, and the equalizer mode is set.

2. To cancel the equalizer mode, once again press direct button ⑨ number "3" while holding in the SHIFT button ⑧. "EQ no conn" appears on the display, and the equalizer mode is canceled.

   * For operations, refer to the DSP or equalizer's owner's guide.

5. TROUBLESHOOTING

English

Problem	Cause	Solution
Power does not turn on. (No sound is produced.)	Fuse is blown.	Replace with a fuse of the same amperage. If the fuse blows again, consult your store of purchase.
	Incorrect wiring.	Check the connections again and connect properly.
Sound quality is poor.	Playback head is dirty.	Use a cleaning tape, etc., to clean the head.
	DOLBY NR button is not pressed.	When listening to a tape recorded with Dolby NR, press the DOLBY NR button and select B NR.
Nothing happens when buttons are pressed.	Microprocessor has malfunctioned due to noise, etc.	Turn off the power, then press the release button and remove the front panel. Release button Press the reset button for about 2 seconds with a thin rod, etc.
	DCP or Main Unit connectors are dirty.	Wipe the dirt off with a soft cloth moistured in alcohol.
DSP or equalizer does not operate.	Microprocessor has malfunctioned due to noise, etc.	Press direct button 1 (for more than 2 seconds) while holding in the DSP button, then turn the power back on.

6. ERROR DISPLAYS

If an error occurs, the type of error is displayed. Take the measures described below to eliminate the problem.

Error display	Cause	Measure
TAPE ER8	Displayed when tape is caught and cannot be ejected.	Eliminate the reason for which the tape is caught.
CDAC ERR	Displayed when the CD changer's internal temperature is too high and playback is stopped automatically.	Lower the surrounding temperature and wait a while for the CD changer's temperature to decrease.
CDAC ER3	Displayed when disc cannot be played due to scratches, etc.	Replace with a non-scratched, non-warped disc.
CDAC ER6	Displayed when disc cannot be played because it is loaded upside-down.	Eject the disc, then reload it properly.
MD ER3	Displayed when MD cannot be played due to scratches, etc.	Replace with a non-scratched disc.
EQ ER99	Communication error between main unit and DSP unit.	Turn the power on and off repeatedly.

If an error display other than the ones described above appears, press the reset button. If the problem persists, turn off the power and consult your store of purchase.

7. SPECIFICATIONS

## Radio Section

Tuning System......PLL synthesizer tuner
Receiving Frequencies......
    FM: 87.5 to 108 MHz (0.05 MHz steps)
    MW: 531 to 1,602 kHz (9 kHz steps)
    LW: 153 to 279 kHz (1 kHz steps)

Tape Deck Section

Cassette Type......Compact Audio Cassette
Playback System
    ......Auto reversing 4-track, 2-channel ste-
        reo cassette tape playback (monaural
        playback also possible)
Tape Types......Metal, Chrome, Normal

General

Max. Power Output......4 x 30 W
Power Supply Voltage
    ......DC 14 V (10.8 to 15.6 V allowable),
        negative ground
Power Consumption......Less than 10 A
Speaker Impedance......4 Ω (4 to 8 Ω allowable)
Auto Antenna Rated Current
    ......   350 mA or less
Weight......1.5 kg
Dimensions......178 (W) x 50 (H) x 152 (D) mm
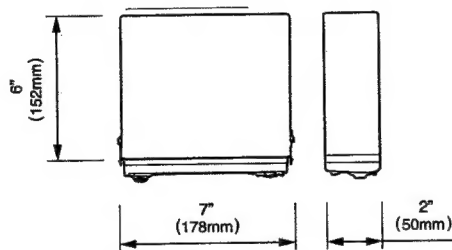
Note:
* Short-circuiting the power antenna terminal or using a power antenna with a current exceeding the rated current can damage internal circuits. Always use with the rated current.
* Specifications and design are subject to change without notice for further improvement.

24